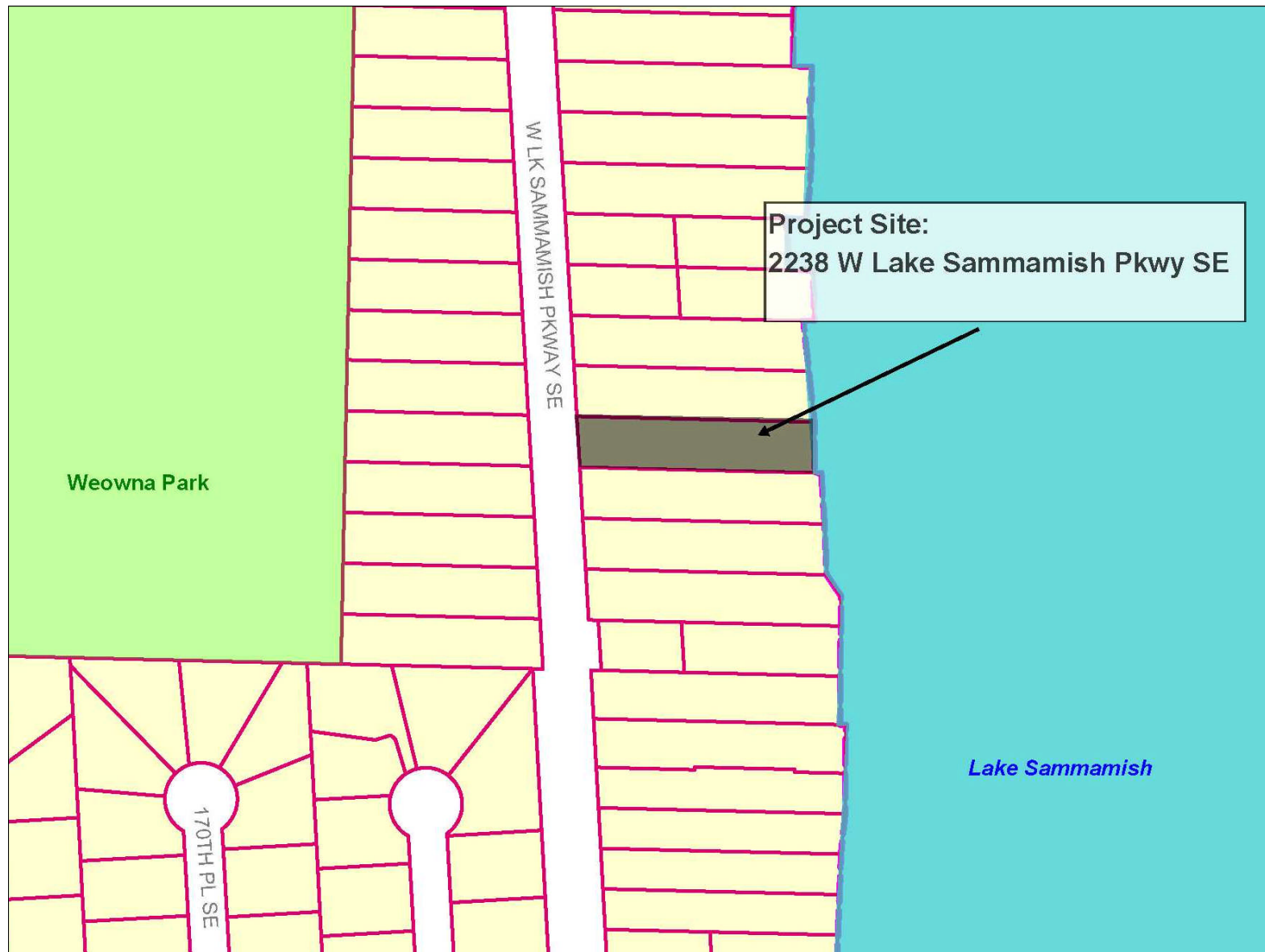


**Elsoe Residence Garage Roof Replacement**  
**File Number: 12-115762-LO**



## PROJECT NARRATIVE FOR CRITICAL AREAS LAND USE PERMIT

Elsoe residence  
2238 West Lake Sammamish Parkway S.E.  
Bellevue, WA 98008  
King County Parcel # 925390-0406 & -0407

This request is to modify the toe-of-slope setback for an existing accessory structure to a single family residence. The building is currently located within the steep slope area. This modification will bring the structure into a legally non-conforming status and is for the purpose of allowing the existing flat roof to be replaced with a new pitched roof to match the new SFR.

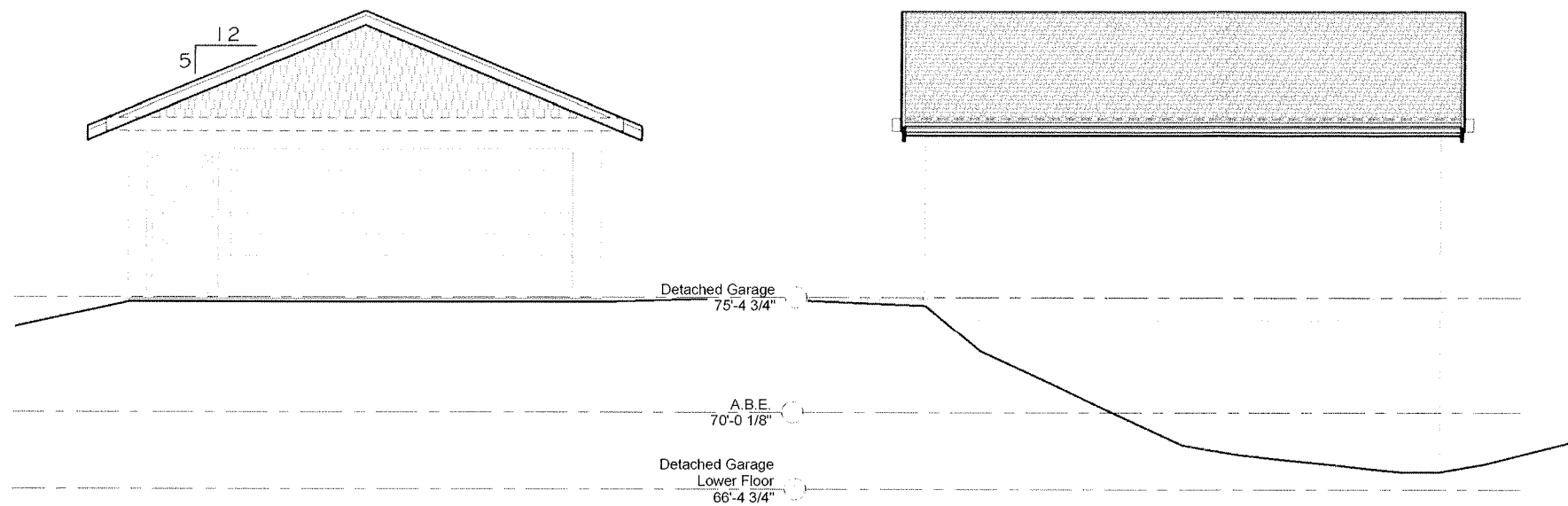
This project is a minor change to a project currently under construction. The new single family residence is currently being built on this waterfront site. There is an existing detached two-car garage which will remain, located landward from the new house. This structure is sited on the toe of a sloped area that meets the definition of a steep slope. This structure dates from the 1950's or 1960's. The slope has been modified over the years and there is city-owned stormwater vault located within the sloped area near the building. The slope is and has been stable and shows no signs of any conditions that would impact, or be impacted by this work in any way.

This proposal is to replace the existing flat roof structure with a new pitched roof atop the existing building. There will be no impact to the steep slope area as the work will be confined to the existing building footprint. This proposal is purely cosmetic in nature and will enhance the visual character of the neighborhood by making the garage structure compatible with the design of the new house currently under construction. **THERE IS NO SITE RELATED WORK ASSOCIATED WITH THIS MODIFICATION PROPOSAL.**

Received

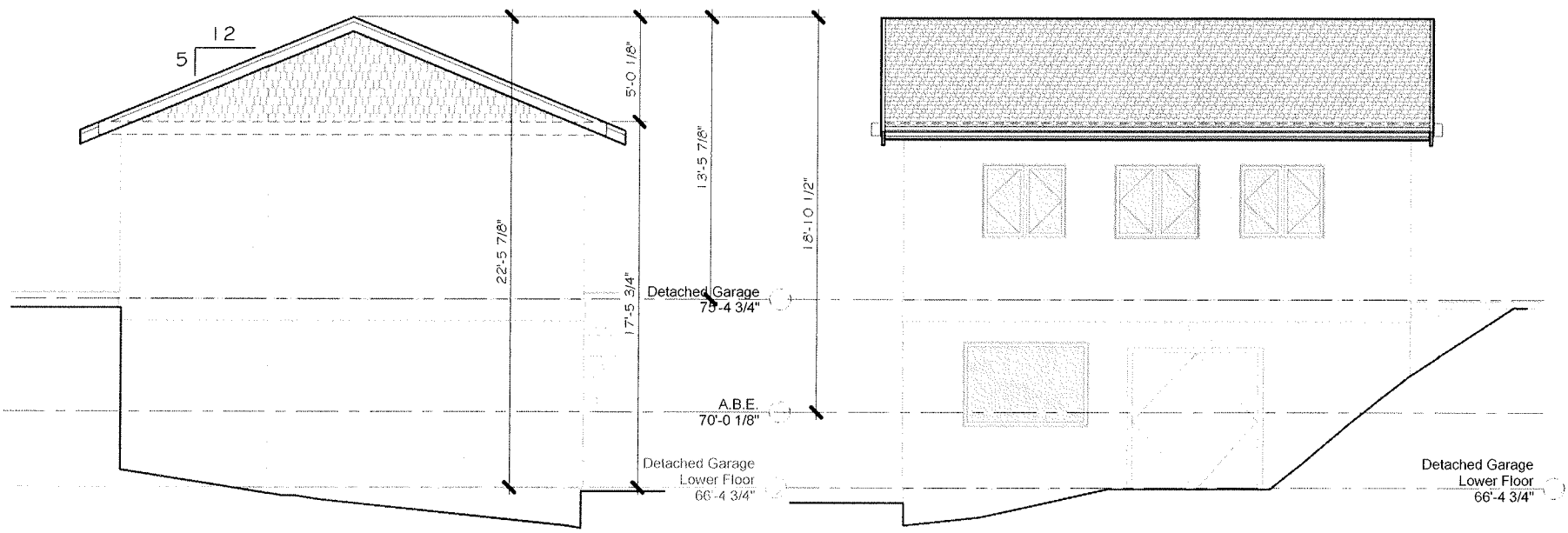
MAY 30 2012

Permit Processing



**NORTH ELEVATION**

**WEST ELEVATION**

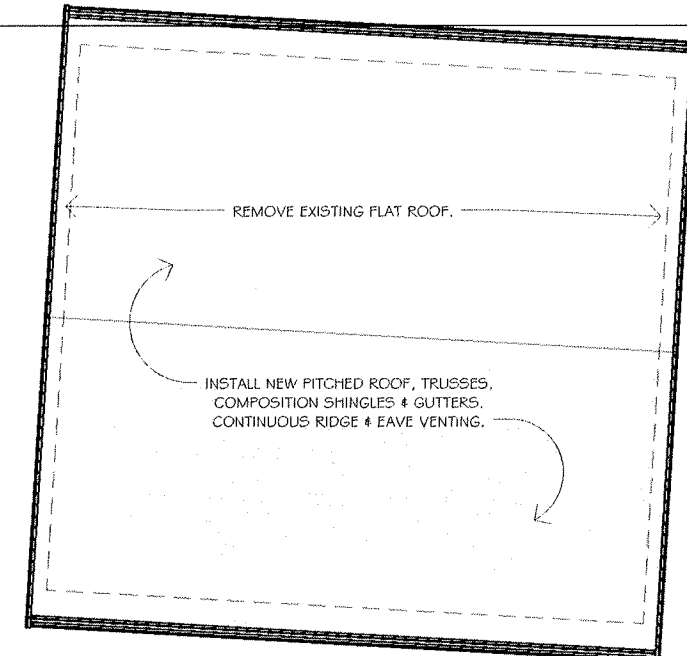


**SOUTH ELEVATION**

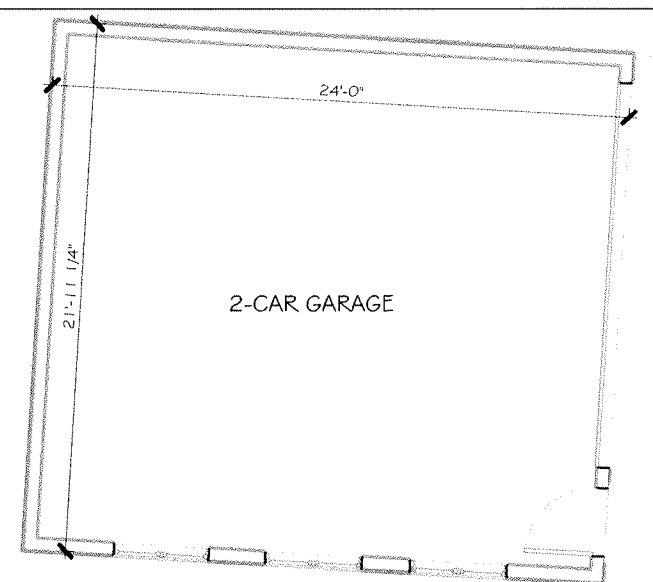
**EAST ELEVATION**

**SCOPE OF WORK:**

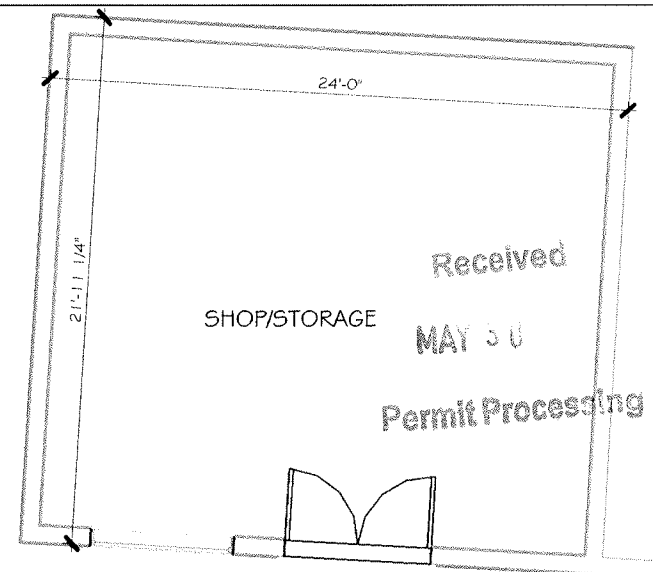
THIS PERMIT IS FOR REPLACING THE EXISTING FLAT ROOF ON AN EXISTING ACCESSORY GARAGE STRUCTURE WITH A NEW PITCHED ROOF OF PREFABRICATED TRUSSES AT 24 INCHES ON-CENTER, SET ON THE EXISTING WALL PLATE (ADJUSTED TO LEVEL EXISTING SLOPE).  
 ROOFING MATERIAL, GABLE INFILL AND EAVE & RAKE DETAILING TO MATCH PRIMARY STRUCTURE.  
 THERE IS NO SITE RELATED WORK ASSOCIATED WITH THIS SCOPE OF WORK.



**DETACHED GARAGE ROOF PLAN**



**DETACHED GARAGE FLOOR PLAN**



**DETACHED GARAGE LOWER FLOOR PLAN**

DATE	BY	DESCRIPTION
5/22/12	BOS	TOE OF SLOPE SETBACK MODIFICATION FOR NEW ROOF

**Elsoe Residence**  
 2238 West Lake Sammamish Parkway S.E.  
 Bellevue, Washington 98008  
 Parcel #: 925390-0406

**DETACHED GARAGE**

**WACHPERSON**  
 CONSTRUCTION & DESIGN  
 21626 SE 28th ST. SAMMAMISH, WA 98075-7125  
 PH. 425.391.3333 FAX 425.557.2841





# SITE PLAN

Scale: 1" = 40'-0"

[illegible]

LEAD AGENCY:

City of Bellevue  
Department of Planning & Community Development  
450 110th. Avenue N.E. Bellevue, Washington  
P.O. Box 90012 Bellevue, Washington 98009-9012  
Ph: (425) 452-6864 Fax: (425) 452-5225

POINT	EXIST. GRADE	COUNT
A	75.40	1
B	66.40	1
C	65.00	1
D	65.50	1
E	66.40	1
F	67.00	1
G	68.20	1
H	75.40	1
I	75.40	1
J	75.40	1
AVG. EXIST. GRADE		10 70.01

- AVERAGE EXISTING GRADE =  $700.01/10 = 70.01$
- GARAGE FLOOR ELEVATION =  $75.40'$
- RIDGE ELEVATION:  $75.40 + 13.50 = \underline{88.90'}$
- ALLOWABLE BUILDING HEIGHT FROM AVERAGE EXISTING GRADE:  $70.01 + 35.00 = \underline{105.01'}$

$105.01'$  IS GREATER THAN  $88.90'$  OK  
(SEE DRAWING 46.0 FOR COMPLIANCE DIAGRAM)

GROSS LOT AREA: 18,721 SF  
LESS CRITICAL AREAS:  
100 YEAR FLOOD PLAIN <2,548 SF>  
STEEP SLOPES <1,452 SF>

NET LOT AREA: 14,721 SF

ALLOWABLE LOT COVERAGE  
@ 35% OF NET LOT AREA: 5,152 SF

FOOTPRINT OF NEW RESIDENCE: 3,647 SF  
(INCL. COVERED PORCHES & DECKS)  
EXISTING GARAGE TO REMAIN: 508 SF  
EXISTING CABANA TO REMAIN: 303 SF  
TOTAL PROPOSED LOT COVERAGE: 4,458 SF  
LESS THAN 5,152 O.K.  
 $4,458 / 14,721 = 30.28\%$

ALLOWED IMPERVIOUS AREA  
@ 50% OF GROSS LOT AREA: 9,361 SF

FOOTPRINT OF NEW RESIDENCE: (ROOF DRIPLINE, INCLUDING COVERED PORCHES & DECKS)	4,007 SF
EXISTING GARAGE TO REMAIN:	658 SF
EXISTING CABANA TO REMAIN:	413 SF
PERVIOUS DECKS, PATIOS & WALKS:	250 SF
DRIVENAY:	<u>3,129 SF</u>

PROPOSED IMPERVIOUS SURFACES: 8,457 SF  
(INCLUDES BUILDING ROOFLINE,  
DRIVEWAY, WALKWAYS & DECKS)  
LESS THAN 9,361 OK  
 $8,457 / 18,721 = 45.17\%$

**PARCEL #:** 925390-0406

**SITE ADDRESS:** 2238 West Lake Sammamish Parkway SE  
Bellevue, WA 98008

**PROPERTY OWNER:** Steve & Shari Elsoe

**ARCHITECT  
& CONTRACTOR** MACPHERSON CONSTRUCTION & DESIGN  
Attn: Robert H. Sorensen AIA  
21626 SE 28th Street,  
Sammamish WA 98075-7125  
Ph: (425) 391-3333  
Fax: (425) 557-2841

**ENGINEER:** QUANTUM CONSULTING ENGINEERS  
Jack Higgins, P.E., S.E.  
1511 Third Avenue, Suite 323  
Seattle, WA 98101  
Ph: (206) 957-3900  
Fax: (206) 957-3901

LOTS A AND B OF KING COUNTY SHORT PLAT NO. 477130, RECORDED UNDER RECORDING NUMBER 7708100914, BEING A PORTION OF LOT 77, WEOHNA BEACH, ACCORDING TO THE UNRECORDED PLAT THEREOF IN THE SOUTHWEST QUARTER OF SECTION 1, TOWNSHIP 24 NORTH, RANGE 5 EAST, WILLAMETTE MERIDIAN, IN KING COUNTY, WASHINGTON.

<u>LOT ZONING:</u>	R 3.5
<u>LOT SIZE:</u>	18,721 S.F. ( .43 Acres)
<u>LOT SLOPE:</u>	19.46%
<u>ALLOWED LOT COVERAGE:</u>	95% MAX.
<u>ALLOWED IMPERVIOUS AREA:</u>	50% MAX.
<u>BASE BUILDING HEIGHT:</u>	35 FEET FROM AVERAGE GRADE, 30 FEET FROM FINISH GRADE TO MID-SLOPE (LUC 20.50.00)
<u>SETBACK - FRONT YARD:</u>	20 FEET
<u>SETBACK - REAR YARD:</u>	(SHORELINE SETBACK) 0' MIN. (LUC 20.255.08)
<u>SETBACK - SIDE YARDS:</u>	5 FEET MIN. TOTAL BACKSET MIN. (LUC 20.20.00) MINOR BUILDING ELEVATION UP TO 18' (LUC 20.20.00)

## Permit Processing

# Elsoe Residence

22238 West Lake Sammamish Parkway S.E.  
Bellevue, Washington 98008  
Parcel #: 925390-0406

LAND USE PERMIT SITE PLAN

**MACPHERSON**  
CONSTRUCTION & DESIGN  
2045 E. 98th St. • Sarnia, ON N6A 3T9  
519-336-2200 • [www.mcpdesign.ca](http://www.mcpdesign.ca)

DRAWING NUMBER:

A 1.0s

OF DRAWINGS



# BOUNDARY/TOPOGRAPHIC SURVEY

A PORTION OF GOV'T LOT 4 (THE SE. 1/4 OF THE SW. 1/4)  
SECTION 1, TOWNSHIP 24 NORTH, RANGE 5 EAST, W.M.,  
KING COUNTY, WASHINGTON

## LEGAL DESCRIPTION:

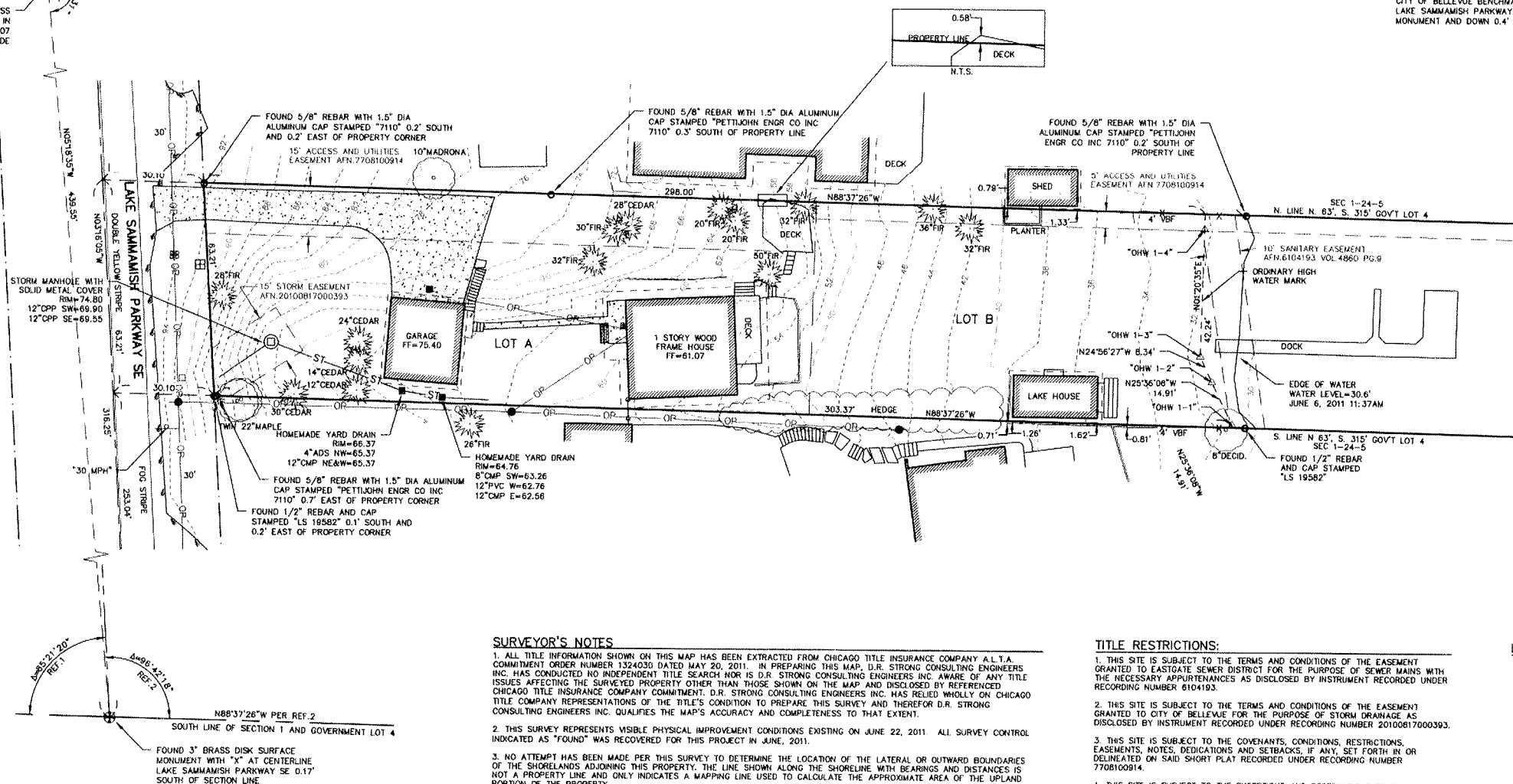
LOTS A AND B OF KING COUNTY SHORT PLAT NUMBER 477130, RECORDED UNDER RECORDING NUMBER 7708100914, BEING A PORTION OF LOT 77, WEDONA BEACH, ACCORDING TO THE UNRECORDED PLAT THEREOF IN THE SOUTHWEST QUARTER OF SECTION 1, TOWNSHIP 24 NORTH, RANGE 5 EAST, WILLAMETTE MERIDIAN, IN KING COUNTY, WASHINGTON.

## REFERENCES:

1. KING COUNTY SHORT PLAT NUMBER 477130, RECORDED UNDER RECORDING NUMBER 7708100914.
2. RECORD OF SURVEY RECORDED UNDER RECORDING NUMBER 20080212900001.
3. RECORD OF SURVEY RECORDED UNDER RECORDING NUMBER 199311228006.

FOUND COB 463, 3" BRASS DISK IN 4" SO CONCRETE IN CASE. CITY OF BELLEVUE SURVEY MONUMENT H463 V461 -0.4' BELOW GRADE

FOUND COB 1907, 3" BRASS DISK IN 4" SO CONCRETE IN CASE. CITY OF BELLEVUE 1907 V480 -0.4' BELOW GRADE



## SURVEYOR'S NOTES

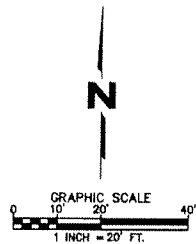
1. ALL TITLE INFORMATION SHOWN ON THIS MAP HAS BEEN EXTRACTED FROM CHICAGO TITLE INSURANCE COMPANY A.L.T.A. COMMITMENT ORDER NUMBER 1324030 DATED MAY 20, 2011. IN PREPARING THIS MAP, D.R. STRONG CONSULTING ENGINEERS INC. HAS CONDUCTED NO INDEPENDENT TITLE SEARCH NOR IS D.R. STRONG CONSULTING ENGINEERS INC. AWARE OF ANY TITLE ISSUES AFFECTING THE SURVEYED PROPERTY OTHER THAN THOSE SHOWN ON THE MAP AND DISCLOSED BY REFERENCED CHICAGO TITLE INSURANCE COMPANY COMMITMENT. D.R. STRONG CONSULTING ENGINEERS INC. HAS RELIED WHOLLY ON CHICAGO TITLE COMPANY REPRESENTATIONS OF THE TITLE'S CONDITION TO PREPARE THIS SURVEY AND THEREFORE D.R. STRONG CONSULTING ENGINEERS INC. QUALIFIES THE MAP'S ACCURACY AND COMPLETENESS TO THAT EXTENT.
2. THIS SURVEY REPRESENTS VISIBLE PHYSICAL IMPROVEMENT CONDITIONS EXISTING ON JUNE 22, 2011. ALL SURVEY CONTROL INDICATED AS "FOUND" WAS RECOVERED FOR THIS PROJECT IN JUNE, 2011.
3. NO ATTEMPT HAS BEEN MADE PER THIS SURVEY TO DETERMINE THE LOCATION OF THE LATERAL OR OUTWARD BOUNDARIES OF THE SHORELANDS ADJOINING THIS PROPERTY. THE LINE SHOWN ALONG THE SHORELINE WITH BEARINGS AND DISTANCES IS NOT A PROPERTY LINE AND ONLY INDICATES A MAPPING LINE USED TO CALCULATE THE APPROXIMATE AREA OF THE UPLAND PORTION OF THE PROPERTY.
4. APPROXIMATE UPLAND PROPERTY AREA = 18721± SQUARE FEET 0.4298± ACRES).
4. ALL DISTANCES ARE IN FEET.
5. THIS IS A FIELD TRAVERSE SURVEY. A LEICA FIVE SECOND COMBINED ELECTRONIC TOTAL STATION WAS USED TO MEASURE THE ANGULAR AND DISTANCE RELATIONSHIPS BETWEEN THE CONTROLLING MONUMENTATION AS SHOWN. CLOSURE RATIOS OF THE TRAVERSE MET OR EXCEEDED THOSE SPECIFIED IN WAC 332-130-090. ALL MEASURING INSTRUMENTS AND EQUIPMENT ARE MAINTAINED IN ADJUSTMENT ACCORDING TO MANUFACTURER'S SPECIFICATIONS.
6. UTILITIES OTHER THAN THOSE SHOWN MAY EXIST ON THIS SITE. ONLY THOSE UTILITIES WITH EVIDENCE OF THEIR INSTALLATION VISIBLE AT GROUND SURFACE ARE SHOWN HEREON. UNDERGROUND UTILITY LOCATIONS SHOWN ARE APPROXIMATE ONLY. UNDERGROUND CONNECTIONS ARE SHOWN AS STRAIGHT LINES BETWEEN SURFACE UTILITY LOCATIONS BUT MAY CONTAIN BENDS OR CURVES NOT SHOWN. SOME UNDERGROUND LOCATIONS SHOWN HEREON MAY HAVE BEEN TAKEN FROM PUBLIC RECORDS. D.R. STRONG CONSULTING ENGINEERS INC. ASSUMES NO LIABILITY FOR THE ACCURACY OF PUBLIC RECORDS.

## TITLE RESTRICTIONS:

1. THIS SITE IS SUBJECT TO THE TERMS AND CONDITIONS OF THE EASEMENT GRANTED TO EASTGATE SEWER DISTRICT FOR THE PURPOSE OF SEWER MAINS WITH THE NECESSARY APPURTENANCES AS DISCLOSED BY INSTRUMENT RECORDED UNDER RECORDING NUMBER 6104193.
2. THIS SITE IS SUBJECT TO THE TERMS AND CONDITIONS OF THE EASEMENT GRANTED TO CITY OF BELLEVUE FOR THE PURPOSE OF STORM DRAINAGE AS DISCLOSED BY INSTRUMENT RECORDED UNDER RECORDING NUMBER 20100817000393.
3. THIS SITE IS SUBJECT TO THE COVENANTS, CONDITIONS, RESTRICTIONS, EASEMENTS, NOTES, DEDICATIONS AND SETBACKS, IF ANY, SET FORTH IN OR DELINEATED ON SAID SHORT PLAT RECORDED UNDER RECORDING NUMBER 7708100914.
4. THIS SITE IS SUBJECT TO THE EXCEPTIONS AND RESERVATIONS CONTAINED IN THE DEED AS RECORDED UNDER RECORDING NUMBER 2225918.
5. THIS SITE IS SUBJECT TO THE TERMS AND CONDITIONS OF NOTICE OF CHARGES BY WATER, SEWER, AND/OR STORM AND SURFACE WATER UTILITIES, BY INSTRUMENT RECORDED UNDER RECORDING NUMBER 9612200938.
6. THIS SITE IS SUBJECT TO PARAMOUNT RIGHTS AND EASEMENTS IN FAVOR OF THE UNITED STATES FOR COMMERCE, NAVIGATION, FISHERIES AND THE PRODUCTION OF POWER.
7. THIS SITE IS SUBJECT TO MATTERS DISCLOSED BY SURVEY RECORDED UNDER RECORDING NUMBER 8405179006.

## LEGEND:

- ⊕ FOUND MONUMENT AS NOTED
- FOUND CORNER MONUMENT AS NOTED
- △ ORDINARY HIGH WATER LATHE PLACED BY OTHERS AND MARKED AS NOTED
- ⊞ ELECTRIC METER
- ROAD SIGNAGE
- ⊞ MAILBOX
- TELEPHONE PEDESTAL
- POWER POLE
- ⊞ WATER METER
- ⊞ STORM DRAIN MANHOLE
- ⊞ YARD DRAIN
- STORM LINE
- OVERHEAD POWER



## BASIS OF BEARINGS:

NAD83(NSRS 2007)  
N03°09'06"W BETWEEN THE FOUND CITY OF BELLEVUE HORIZONTAL CONTROL MONUMENTS 1907 AND 463

## VERTICAL DATUM:

NAVD 88 PER CITY OF BELLEVUE VERTICAL CONTROL.

## BENCHMARK:

CITY OF BELLEVUE BENCHMARK NO. 480: FOUND ON THE WEST SIDE OF LAKE SAMMAMISH PARKWAY SE, 3" BRASS DISC SET IN 4" CONCRETE MONUMENT AND DOWN 0.4' IN MONUMENT CASE ELEVATION = 95.87 FEET.

ELSOE  
RESIDENCE

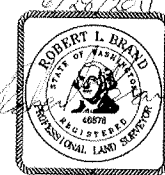
2238 WEST LAKE SAMMAMISH PKWY SE  
BELLEVUE, WASHINGTON 98008  
KING COUNTY  
TAX PARCEL NO. 9253900406 & 9253900407

ROGER MACPHERSON  
DESIGN

21626 SE 28TH STREET  
SAMMAMISH, WASHINGTON 98075  
206-375-3397

DRS D.R. STRONG  
CONSULTING ENGINEERS

ENGINEERS PLANNERS SURVEYORS  
1004H NE 386 PLACE, SUITE 101  
KIRKLAND, WA 98033  
425.827.3063 OFFICE  
800.962.1402 TOLL FREE  
425.827.2423 FAX  
www.dstrong.com



Received  
MAY 30 2012

Permit Processing

DRAFTED BY: SJS/RLB  
FIELD BOOK: 692  
PROJECT SURVEYOR: RLB  
DATE: 6/28/11  
PROJECT NO.: 11038  
SHEET 1 OF 1



Yonemitsu Geological Services  
10321 SE 192<sup>nd</sup> Street Renton, Washington 98055  
206-390-0635

August 18, 2011

Mr. Robert Sorenson  
MacPherson Design and Construction  
21626 SE 28<sup>th</sup> Street  
Sammamish, WA 98075-7125

Re: **Geotechnical Recommendations**  
Proposed Elsoe Residence  
2238 West Lake Sammamish Parkway SE  
Bellevue, Washington  
RMP Project No. 11-159-01

Dear Mr. Sorenson,

This report summarizes the results of our geotechnical engineering evaluation of the property located on the west side of Lake Sammamish in Bellevue. It is understood that the new residence will be sited on the lower portion of the property and approximately 70 feet from the edge of the lake.

The purpose of this report is to describe the geologic and subsoil conditions on this site, and to provide geotechnical recommendations for foundation design. A preliminary site plan was provided by your office shows the location of the proposed structure on this lakeside property.

#### Site Conditions

An existing residence is located on the central portion of the property, and there is an access driveway that leads to the garage on the western end of the site. A new driveway will be graded to reach the garage that will be at the west end of the new two story residence with a partial daylight basement. The ground surface has a moderate slope from the west to east end of the site with a fall in elevation of about 26 feet across the proposed building pad area. Localized steep slopes exist on this site, but there are no unstable areas on the property that require geologic or engineering analyses.

Published USGS geologic mapping for this area of King County was used to confirm subsoil conditions under this site. The property is underlain by dense glacial deposits (Qva) consisting of sands, silty sands and gravel that were exposed in two test borings. These soils will provide excellent support for the proposed residence foundations and basement floor slab.

Subsurface exploration included drilling of two auger borings at the locations shown on the Site Plan. These hand drilled borings encountered topsoil and modified fill soils that were about two feet deep. Below the fill were dense silty sands and sands with gravel that became wet below a depth of about 2.5 feet. Very dense native glacial soils were encountered at five feet in HA-1 and at three feet in HA-2. Refer to the Summary Logs on Appendix A.

### Geotechnical Recommendations

Based on the results of our geotechnical evaluation, the dense glacial soils consisting of silty sands and gravels will provide excellent support for the new residence foundations. Foundations on these dense glacial soils can be designed for a bearing value of 3000 psf for footings that are 18 inches deep. Settlement of these footings will be less than 1/2 inch with a majority of this settlement occurring during construction. For seismic design the site has been classified as "D" since the bearing soils are dense glacially consolidated silty sands and gravel. Temporary seismic loads acting on these structures should be based on a value of 0.40 for the soil conditions underlying this property. There is no liquefaction potential for these dense glacial deposits.

Basement retaining walls should be designed using an active earth pressure of 35 pcf and a passive pressure of 250 pcf. This assumes that the backfill behind these walls is near level. If the walls are restrained an at-rest value of 60 pcf should be used. A friction value of 0.40 may be used for sliding resistance at the base of the proposed footings. Passive and friction values have a safety factor of 1.5 included.

All foundations and retaining walls should have a perforated subdrain placed at the bottom of the footings for subsurface drainage control. These 4 inch perforated pipes should be embedded in drain gravel, covered with geofilter cloth with the backfill placed and compacted over these subdrains in thin lifts.

Concrete basement floor slab should be reinforced to control shrinkage cracking. The basement level of the house will require excavation to reach subgrade elevation of about 43 feet, and these soils will be suitable for direct support of the floor slab. From 2 to 14 feet of excavation will be performed on the north and south sides of the basement that will require temporary slope support. Recommendations can be provided for the use of Ultra-block walls and temporary slope cuts when final plans have been prepared.

### Temporary Erosion Control

It is recommended as a precaution for surface water runoff that silt fencing be installed between the east side of the building pad near the lake shore for sediment control during construction. Permanent erosion control will be provided with appropriate landscaping and surface drainage conditions that are included in the design plans for this residential project.

Excavated soils obtained from the basement area of the building pad may be stockpiled onsite for future use as backfill around the retaining walls. These soils may be wet and will require some time to allow for drying back to near optimum moisture levels.

### Summary

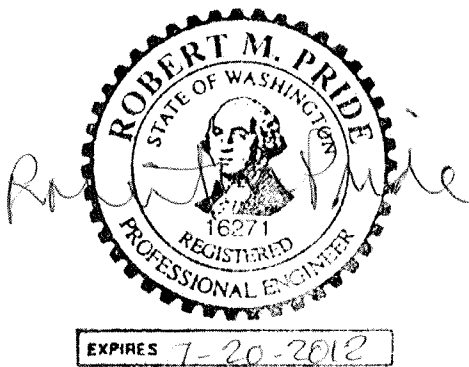
The conclusions and recommendations presented in this report are based on 1)

our interpretation and evaluation of soil conditions on this site, 2) confirmation of the actual subsurface conditions encountered during construction, and 3) the assumption that sufficient observation and testing will be performed during the appropriate phases of the work.

Our findings and recommendations in this report were prepared in accordance with generally accepted principles of geotechnical engineering as practiced in the Puget Sound area at the time our work was performed. We make no warranty, either express or implied.

Please call if there are any questions.

Respectfully,



Respectfully,

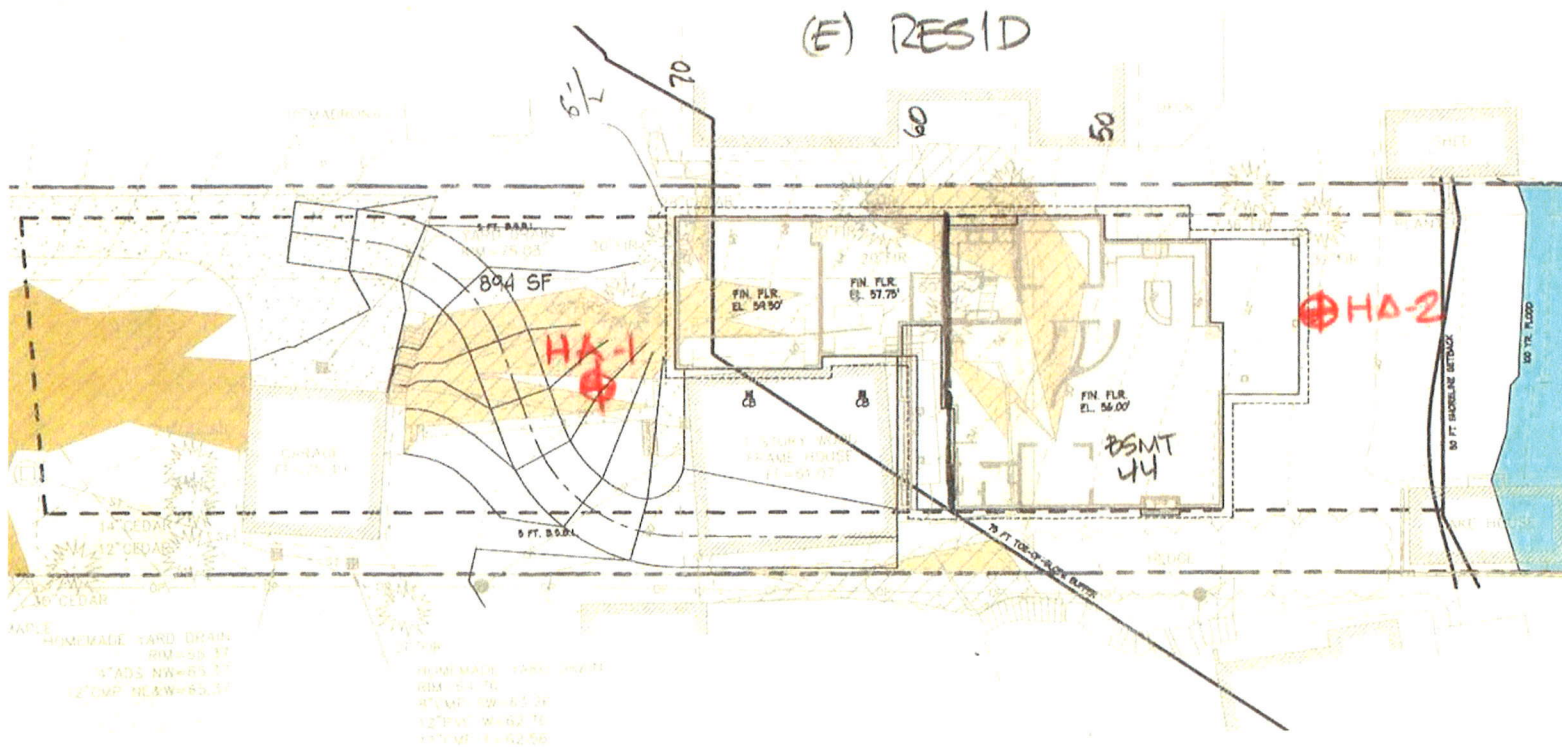
Robert M. Pride, P. E.  
Principal Geotechnical Engineer

David Yonemitsu, CEG  
Principal Engineering Geologist

dist: (1) Addressee

rmp: MacPherElsoe1





## Consulting Engineer